Datasheet

Paperless Recorder

SUP-R6000C

Supmea®

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Paperless Recorder
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Universal input of color paperless recorder (capable of inputting by means of configuration: standard voltage, standard current, thermocouple, thermal resistance, millivolt, etc.). It can be equipped with 18-channel alarm output or 12-channel analog transmitting output, RS232/485 communication interface, Ethernet interface, mini-printer interface, USB interface and SD card socket; can provide sensor distribution; is equipped with powerful display function, real-time curve display, historical curve retrospection, bar graph display, alarm list display, etc. The meter is of high cost effectiveness due to its humanized design, perfect function, reliable hardware quality and exquisite craft.

Applications

- Chemical industry
- Power industry
- Iron and steel metallurgy
- Meteorological monitoring
- Pharmaceutical industry
- Food and Beverage Industry

Features

- High-speed processing capability
- High Precision Measurement
- Wide range of input signals
- Multiple Output Functions
- Multiple communication interfaces
- Flexible channel configuration
- Highly scalable

Paperless Recorder

Principle

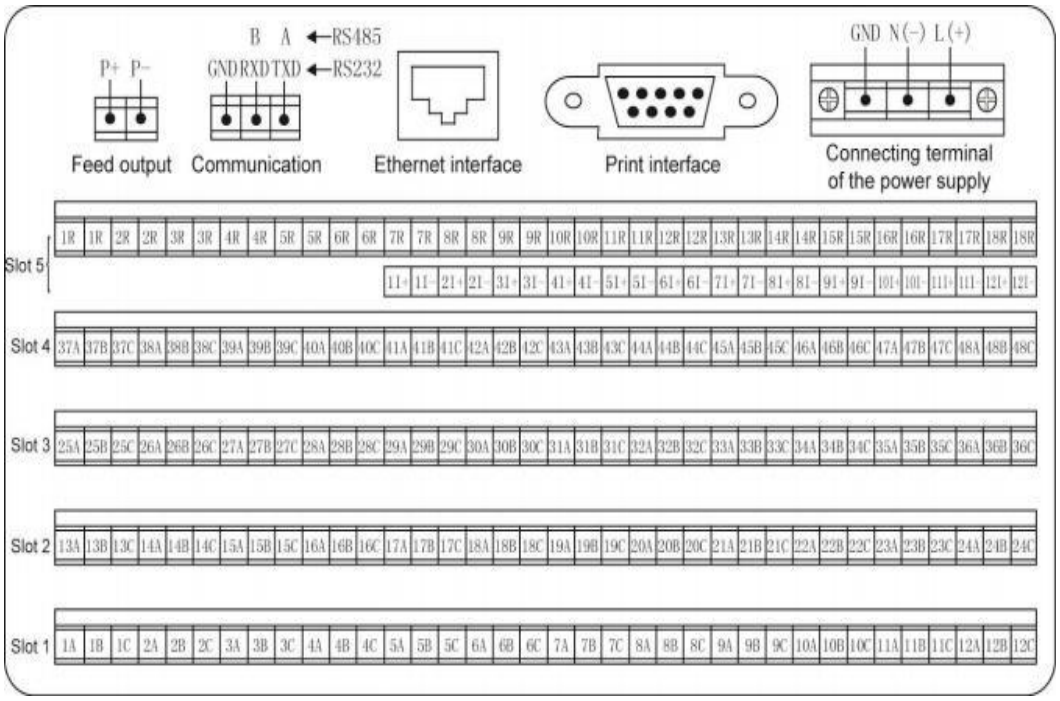
The R6000C Paperless Recorder works as follows. It has diverse input interfaces for signals like voltage, current, and temperature signals. These signals are sent to the 32-bit Cortex-M4 micro-processor. The processor converts them precisely based on preset algorithms, calculates the actual values, and stores the data in internal memory like FLASH. The data is shown on a 7-inch TFT LCD screen. Also, it communicates with external devices via RS485/RS232 and Ethernet interfaces, enabling data transfer for further analysis or to receive control commands.

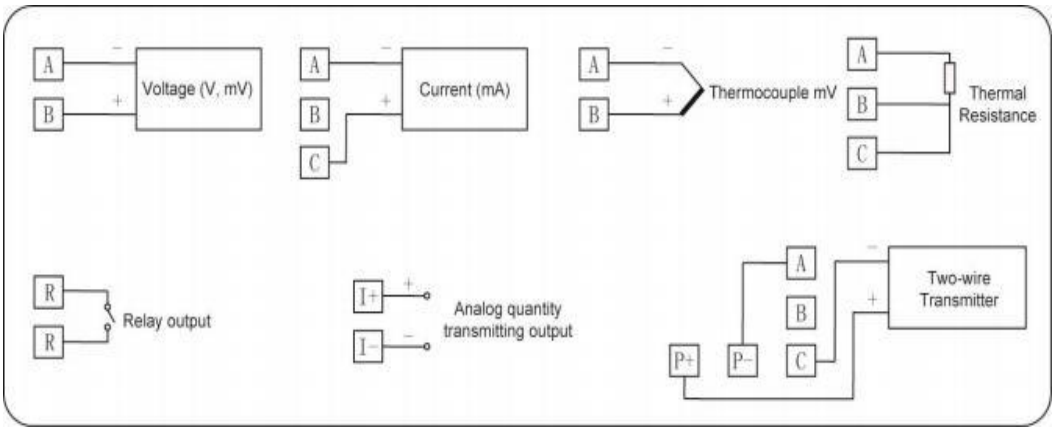
Parameters	
Input Signal	Current: 0～20mA, 0～10mA, 4～20mA, 0～10mA square root, 4～20mA square root Voltage: 0～5V, 1～5V, 0～10V, ±5V, 0～5V square root, 1～5V square root, 0～20 mV, 0~ 100mV, ±20mV, ±100mV Thermal resistance: Pt100, Cu50, Cu53, Cu100, BA1, BA2 Linear resistance: 0～400 Ω Thermocouple: B, S, K, E, T, J,R,N, F2, Wre3-25, Wre5-26
Output Signal	Analog output: 4～20mA (load resistance ≤380Ω), 0～20mA (load resistance ≤380Ω), 0~ 10mA (load resistance ≤760Ω), 1～5V (load resistance ≥250KΩ), 0～5V (load resistance ≥ 250KΩ), 0～10V (load resistance ≥500KΩ)
	Alarm output: normally open relay contact output, where the contact capacity is 1 A/250 VAC 1A/24VDC (resistive load) (! Note: Please do not carry load directly in case the load exceeds the contact capacity of relay.)
	Feed output: DC24 V ± 1, load current ≤ 250 mA
	Communication output: RS485/RS232 communication interface, 2400~19200 bps baud rate (able to be set); standard MODBUS RTU communication protocol is adopted; the communication distance of RS-485 can be as long as 1 kilometer; the communication distance of RS-232 can be as long as 15 m; EtherNet communication interface is adopted, where the communication speed is 10 M.
Measurement Accuracy	0.2%FS±1d
Sampling Period	1 s
Setting Mode	The button is set in the form of panel soft touch; setting values of parameters are locked with passwords and will be saved permanently in case of outage.
Display Method	7-inch 800 * 480 dot-matrix widescreen TFT high brightness color graphics and LCD display; LED backlight; with clear pictures and wide visual angle. Display contents can be composed of characters, figures, conditional curves, bar graphs, etc.; through panel button, page turning, forward and backward search of historical data, time scale change of curves, etc. can be realized.
Data Backup	Data backup and conversion storage of USB flash disk and SD

	card are support, where the maximum capacity is 32 GB; FAT and FAT32 formats are supported.
Storage Capacity	The capacity of the internal Flash memory is 64 M Byte.
Recording Interval	Nine options including 1, 2, 4, 6, 15, 30, 60, 120 and 140 s can be selected.
Storage Length (continu record without power-off)	24 days (1 s interval) - 5825 days (240 s interval)
Environment Condition	Environment temperature: -10 ~ 50°C; Relative humidity: 10 ~ 90% RH (without condensation of moisture); Avoidance of contact of high corrosive gas. (! Note: If the field environment is poor, special instruction should be given when ordering.)
Working Power Supply	AC 85 ~ 264 V (power supply of the switches), 50/60 Hz; DC12 ~ 36 V (power supply of the switches);
Power Consumption	≤20 W.

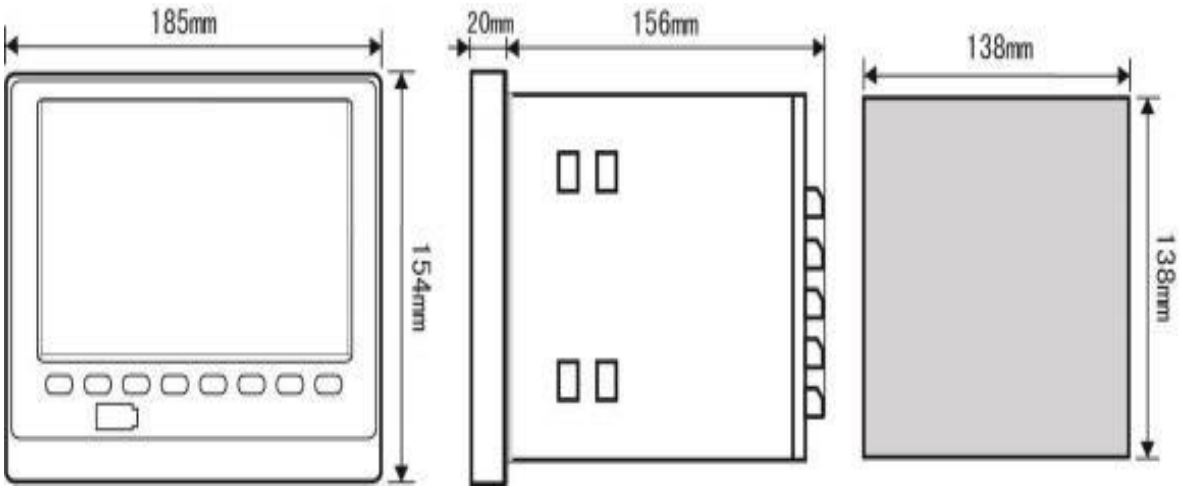
Wiring

Wiring diagram ofthe instrument





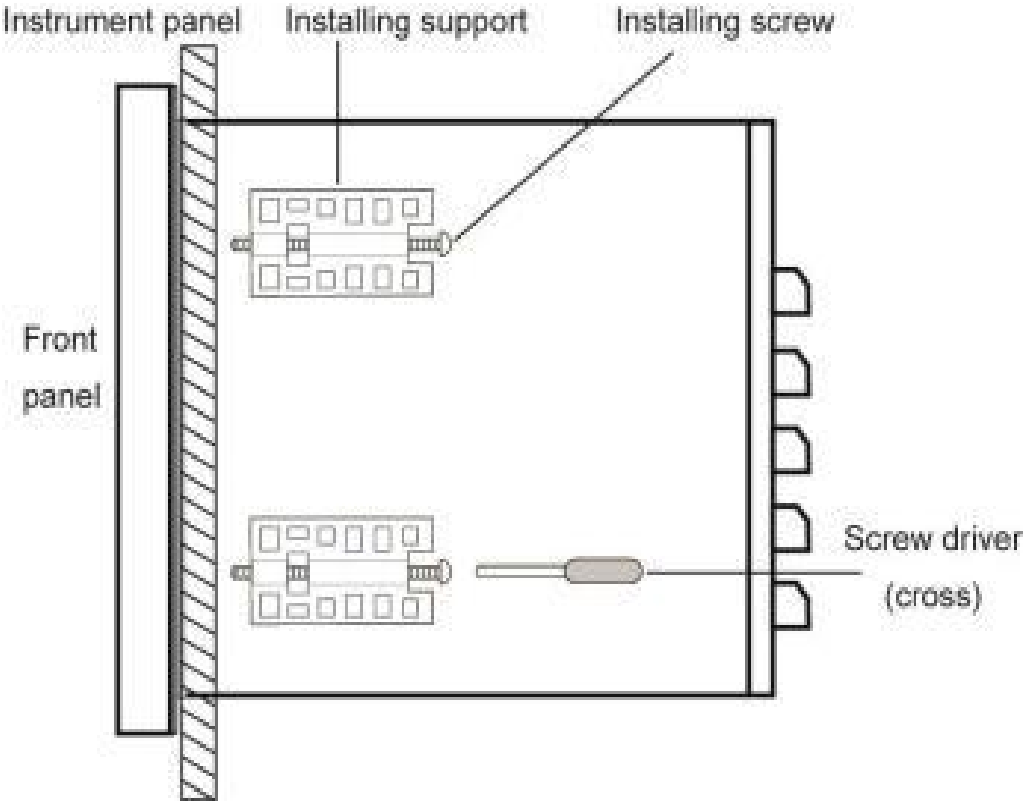
Dimension



Installation

Installation

Instrument installment
(1) Instrument method
A. Insert the instrument from the front of the instrument panel
B. Utilize the installing supports equipped by the instrument
Installment method is as shown on the right figure.
Two sides of the instrument are fixed by four installing supports.
(2) Refer to the right figure for the installment figure.



Ordering code

SUP-R6000C -01-00-00-00-00-0-E1-SE-E1-XX									Description
SUP-R6000C	-	-	-	-	-	-	-	-	-	
Input Channel	01									1
	02									2
	04									4
	06									6
	08									8
	10									10
	12									12
	14									14
	16									16
	18									18
	20									20
	22									22
	24									24
	26									26
	28									28
	30									30
	32									32
	34									34
	36									36
	38									38
	40									40
	42									42
	44									44
	46									46
	48									48
	XX									Others
Converter Output		00								No
		1A								1-channel 4-20mA
		2A								2-channel 4-20mA
		4A								4-channel 4-20mA
		6A								6-channel 4-20mA
		8A								8-channel 4-20mA
		AA								10-channel 4-20mA
		BA								12-channel 4-20mA
		XX								Others
PID			00							No
			1A							1-channel 4-20mA
			2A							2-channel 4-20mA
			4A							4-channel 4-20mA
			6A							6-channel 4-20mA

	8A				8-channel 4-20mA
	2S				2-channel relay
	4S				4-channel relay
	6S				6-channel relay
	8S				8-channel relay
	XX				Others
SPST Relay Output	00				No
	01				1-channel
	02				2-channel
	04				4-channel
	06				6-channel
	08				8-channel
	10				10-channel
	12				12-channel
	14				14-channel
	16				16-channel
	18				18-channel
	XX				Others
Communication Output		00			No
		R1			RS485
		R2			RS232
		R3			RS232 Print Interface
		Y6			RS485+RS232 Print Interface
		Y0			Ethernet
		Y1			RS485+Ethernet
		Y2			RS232+Ethernet
		Y3			Ethernet+RS232 Print Interface
		XX			Others
Computational Function			0		No
			B		Flow Accumulation
			C		Temperature and Pressure Compensation+Flow Accumulation
Power Supply and Output				E1	220VAC，1-channel 24VDC
				E0	220VAC，No
				C1	24VDC，1-channel 24VDC
				C0	24VDC，No
Accessories					SE SD card 32GB
Function Customization					XX Others